

**APPLICATION**  
**FOR**  
**UNITED STATES LETTERS PATENT**

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TITLE                SYSTEM AND METHOD FOR  
GENERATING A COMPANY GROUP  
USER PROFILE

DOCKET NO.            END9 2000 0166 US1

**INTERNATIONAL BUSINESS MACHINES CORPORATION**

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**SYSTEM AND METHOD FOR GENERATING A COMPANY GROUP USER  
PROFILE**

**Background of the Invention**

Cross References to Related Applications

5           The following U.S. patent applications, filed  
concurrently or otherwise copending, are assigned to the  
assignee hereof and contain subject matter related, in  
certain respect, to the subject matter of the present  
application.

10       Serial No. 09/657,215, filed 7 Sep 2000, entitled "System and  
Method for Clustering Servers for Performance and Load  
Balancing", assignee docket END9-2000-0104-US1;

15       Serial No. 09/657,216, filed 7 Sep 2000, entitled "System  
and Method for Front End Business Logic and Validation",  
assignee docket END9-2000-0105-US1;

Serial No. 09/657,217, filed 7 Sep 2000, entitled "System  
and Method for Data Transfer With Respect to External  
Applications", assignee docket END9-2000-0106-US1;

Serial No. 09/656,037, filed 7 Sep 2000, entitled "System and Method for Providing a Relational Database Backend", assignee docket END9-2000-0107-US1;

5 Serial No. 09/656,803, filed 7 Sep 2000, entitled "System and Method for Providing a Role Table GUI via Company Group", assignee docket END9-2000-0108-US1;

Serial No. 09/656,967, filed 7 Sep 2000, entitled "System and Method for Populating HTML Forms Using Relational Database Agents", assignee docket END9-2000-0109-US1;

10 Serial No. 09/657,196, filed 7 Sep 2000, entitled "System and Method for Catalog Administration Using Supplier Provided Flat Files", assignee docket END9-2000-0110-US1; and

15 Serial No. 09/657,195, filed 7 Sep 2000, entitled "System and Method for Providing an Application Navigator Client Menu Side Bar", assignee docket END9-2000-0111-US1.

Serial No. 09/\_\_\_\_\_, entitled "SYSTEM AND METHOD FOR AUTOMATING INVOICE PROCESSING WITH POSITIVE CONFIRMATION", assignee docket number END9 2000 0165 US1.

Serial No. 09/\_\_\_\_\_, entitled "SYSTEM AND METHOD FOR  
SHARING DATA ACROSS FRAMES USING ENVIRONMENT VARIABLES ",  
assignee docket number END9 2000 0167 US1.

5 Serial No. 09/\_\_\_\_\_, entitled "SYSTEM AND METHOD FOR  
SYNCHRONIZING LEDGER ACCOUNTS BY COMPANY GROUP", assignee  
docket number END9 2000 0168 US1.

Serial No. 09/\_\_\_\_\_, entitled "SYSTEM AND METHOD FOR  
GROUPING COMPANIES ACCORDING TO ACCOUNTING SYSTEM OR RULES",  
assignee docket number END9 2000 0169 US1.

10 Serial No. 09/\_\_\_\_\_, entitled "SYSTEM AND METHOD FOR FRAME  
STORAGE OF EXECUTABLE CODE", assignee docket number END9  
2000 0174 US1.

15 Serial No. 09/\_\_\_\_\_, entitled "SYSTEM AND METHOD FOR  
INVOICE IMAGING THROUGH NEGATIVE CONFIRMATION PROCESS",  
assignee docket number END9 2000 0175 US1.

Serial No. 09/\_\_\_\_\_, entitled "SYSTEM AND METHOD FOR  
LEVERAGING PROCUREMENT ACROSS COMPANIES AND COMPANY GROUPS",  
assignee docket number END9 2000 0176 US1.

Serial No. 09/\_\_\_\_\_, entitled "SYSTEM AND METHOD FOR  
END9 2000 0166 US1

PROCESSING TAX CODES BY COMPANY GROUP", assignee docket  
number END9 2000 0177 US1.

Serial No. 09/\_\_\_\_\_, filed 2 March 2001, entitled "SYSTEM  
AND METHOD FOR MANAGING INTERNET TRADING NETWORKS", assignee  
5 docket number END9 2000 0178 US1.

The above-identified patent applications are incorporated  
herein by reference.

#### Technical Field of the Invention

10 This invention pertains to a procurement and accounting  
system. More particularly, it relates to a system for  
preparing user profiles for customer company employees  
authorized to access an enterprise procurement and  
requisition system.

#### Background Art

15 A requisition and catalog (RCW) system for access via  
the web and deployed to customers of an enterprise requires  
visibility to all of the authorized users. The RCW system  
requires for each authorized user his name, employee number,  
address (default ship to address for procured goods and

services), and E-mail address. Previously, this information was gathered from various sources, a complex and time consuming process.

5 The enterprise procurement services system, such as the SAP system, and RCW system further require for each such user a company code and a plant code. SAP is a procurement engine used by the an enterprise to satisfy the procurement requirements of a customer company. These codes are configuration entities in SAP, and unknown to the authorized users. There is required a system and method for collecting authorized user identification data and corresponding codes before the user can be permitted to log on to the RCW system to submit a purchase requisition.

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15 A most difficult problem facing such an enterprise is helping customer companies provide such data about its employees. The system and method provided for doing so must be easy for a user requester to use, isolating him from technicalities of SAP or other such back end engines.

20 Further, such a system must make provision for updating the user profile if an employee transfers to a new company within a company group, or to a new plant location.

It is an object of the invention to provide an improved system and method for creating user profiles.

It is a further object of the invention to provide a system and method for creating user profiles which is easy  
5 to use by a prospective requisition requester.

It is a further object of the invention to provide a system and method for authorizing access to a requisition and catalog system by an employee of a company within a company group for which an enterprise provides procurement  
10 services.

It is a further object of the invention to provide an improved system and method for reconfiguring a user profile when that user changes company location.

## Summary of the Invention

A system and method for creating a user profile for a user authorized by a customer company to access services provided by an enterprise, the method including the steps of preparing for each new user a profile entry including a user identifier and company group identifier; responsive to access by an authorized user, obtaining a corresponding profile entry; responsive to the profile entry not including company code and location indicia, displaying to user descriptions of locations for the company group; and responsive to user selection of a location description, populating to the profile entry the corresponding company code and location code.

In accordance with an aspect of the invention, there is provided a computer program product configured to be operable to creating a user profile for a user authorized by a customer company to access services provided by an enterprise.

Other features and advantages of this invention will become apparent from the following detailed description of the presently preferred embodiment of the invention, taken



in conjunction with the accompanying drawings.

### **Brief Description of the Drawings**

Figure 1 is a diagram illustrating the user profile creation and maintenance system and method of the preferred embodiment of the invention.

### **Best Mode for Carrying Out the Invention**

In accordance with the preferred embodiment of the invention, an enterprise provides procurement services to a plurality of customer companies organized in company groups, each company group including one or more related companies which use the same accounting codes and procedures.

Referring to Figure 1, a plurality of related companies 59, 59A are connected to a hub server which includes a company group human resources file. Hub server is connected through fire wall 372 to a requisition and catalog (ReqCatWeb, or RCW) application server 376. RCW server 374 includes a company group HR file, a staging table build

application 378 and a new employee profile build application 382. Applications 402, 404 are logically connected to database server 388, which includes staging table 380, user profile table 384, and plant code table 386.

5           Connected to an RCW web server 390 deployed to customer companies through extra net 394 is a browser operable by a user for accessing a catalog (not shown) maintained by the enterprise, and for submitting to the enterprise requisitions for purchase of commodities and services  
10           against the accounts of a customer company. In exemplary embodiment, extra net 394 may be a secure network, such as a frame relay network connection, or a secure protocol on the world wide web.

15           To support procurement services for a plurality of users from different companies, the enterprise RCW system requires visibility to all of the users, and requires for each user his name, employee number, address (default ship to address for procured goods and services), E-mail address, and a SAP company code and plant code, which are  
20           configuration entities in SAP.

          In operation, by way of overview, the creation and maintenance of the user profile is accomplished according

company groupings: these are titles of corporations, and each grouping may have many company codes (a company grouping is a legal entity with its own requirements).

Company name is passed in a human resource file or

5 interface, to which a company grouping code is added. That data is loaded into employee staging tables of RCW. The process then looks for new employees, builds an employee profile which includes company code and group code (originally blank, then filled out using tables of grouping, company code, plant code, description). A pop down menu  
10 advises a new person to select a location, and from that the employee profile is built.

In step 60, on a periodic basis, customer companies provides an HR file containing a list of all employees that  
15 are authorized to use RCW with a company grouping ID in a company code field. Hub server 52 merges these HR files 59, 59A into a company group HR file 370 which, in step 70, it transmits through fire wall 372 to application server 376 where it is stored in company group HR file 374.

20 In step 401, staging table build application reads file 374 and in step 402 moves it to staging table 380 in database server 388. At this point, company group HR file 374 includes an entry for each person authorized by

companies within a company group, and that entry includes the information available from the customer companies but not other information, such as company code and location code, required by servers 390, 376 and the SAP system and unavailable from the company HR files 59, 59A.

In step 403, new employee profile build application reads from staging table 380 the authorized users and in step 404 adds to user profile table 384 an entry for each new user. At this point, user profile table includes an entry for all authorized users for a company grouping, but critical information (company code and location code) is missing for newly authorized (or changed) users.

Responsive to a request received at web server 390 from requester browser 46 to enter a transaction on behalf of a user, such as accessing a catalog and submitting a requisition for a commodity or service, in step 407 requisition application 392 accesses user profile table 384 to obtain the user's profile. It determines if the user profile for the user has SAP company code and plant code entries, and if not, executes a new user procedure to complete the preparation of the user profile.

In step 409, for a new user, application 392 accesses  
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plant code table 386. Plant code table 386 includes a table including a plurality of entries, each entry including company group code, company code, and location code fields and a description which is meaningful to prospective users.

5 Each company group code may apply to a plurality of company codes, and each company code to a plurality of location codes. From plant code table 386, requisition application 392 populates in step 408 at browser 46 a pop-down list 396 which includes each combination of company code, location  
10 code and description for the user's company group. (The user's company group is input from browser 46 when the user logs on to web server 390.)

The user selects from the pop-down list 396 the  
15 location at which he works, which in step 406 is sent back to application 392. In step 410, application 392 populates the user profile entry in user profile table 384 for this user with the company code and location code corresponding to the description at pop-down list 396 selected by the  
20 user. This completes the user profile entry for this user, who no longer is a new user and may now proceed to access the financial services provided by the enterprise for the company group of which he is an authorized user.

If an employee transfers, that is nicely handled by

making the person look like a new employee when, in steps 60 and 70 his profile data is submitted to application server 376, which will trigger the above process for updating the entry for the user in user profile table 384.

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### **Advantages over the Prior Art**

It is an advantage of the invention that there is provided an improved system and method for creating user profiles.

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It is a further advantage of the invention that there is provided a system and method for creating user profiles which is easy to use by a prospective requisition requester.

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It is a further advantage of the invention that there is provided a system and method for authorizing access to a requisition and catalog system by an employee of a company within a company group for which an enterprise provides procurement services.

It is a further advantage of the invention that there is provided an improved system and method for reconfiguring

a user profile when that user changes company location.

### Alternative Embodiments

It will be appreciated that, although specific  
embodiments of the invention have been described herein for  
5 purposes of illustration, various modifications may be made  
without departing from the spirit and scope of the  
invention. In particular, it is within the scope of the  
invention to provide a computer program product or program  
element, or a program storage or memory device such as a  
10 solid or fluid transmission medium, magnetic or optical  
wire, tape or disc, or the like, for storing signals  
readable by a machine, for controlling the operation of a  
computer according to the method of the invention and/or to  
structure its components in accordance with the system of  
15 the invention.

Further, each step of the method may be executed on any  
general computer, such as an IBM System 390, AS/400, PC or  
the like and pursuant to one or more, or a part of one or  
20 more, program elements, modules or objects generated from  
any programming language, such as C++, Java, Pl/1, Fortran

or the like. And still further, each said step, or a file or object or the like implementing each said step, may be executed by special purpose hardware or a circuit module designed for that purpose.

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Accordingly, the scope of protection of this invention is limited only by the following claims and their equivalents.